Release notes for ENDF/B Development n-062_Sm_144 evaluation



April 26, 2017

• psyche Warnings:

1. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 1.20000E-04 / ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.29133E+02 SHOULD BE 2.83226E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 1.20000E-04 ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.29133E+02 SHOULD BE 2.83226E+02

2. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.20000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.29098E+02 SHOULD BE 2.83196E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.20000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.29098E+02 SHOULD BE 2.83196E+02

3. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.25000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.28867E+02 SHOULD BE 2.82998E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.25000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.28867E+02 SHOULD BE 2.82998E+02

4. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.30000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.28637E+02 SHOULD BE 2.82799E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.30000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.28637E+02 SHOULD BE 2.82799E+02

5. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.35000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.28407E+02 SHOULD BE 2.82601E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.35000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.28407E+02 SHOULD BE 2.82601E+02

6. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.40000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.28177E+02 SHOULD BE 2.82404E+02 (0): URR dens. (a)

SECTION 151

ENERGY = 1.40000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.28177E+02 SHOULD BE 2.82404E+02

7. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.45000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.27947E+02 SHOULD BE 2.82206E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.45000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.27947E+02 SHOULD BE 2.82206E+02

8. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.27718E+02 SHOULD BE 2.82008E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.27718E+02 SHOULD BE 2.82008E+02

9. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.55000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.27488E+02 SHOULD BE 2.81811E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.55000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.27488E+02 SHOULD BE 2.81811E+02

10. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.60000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.27259E+02 SHOULD BE 2.81613E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.60000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.27259E+02 SHOULD BE 2.81613E+02

11. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.65000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.27030E+02 SHOULD BE 2.81416E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.65000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.27030E+02 SHOULD BE 2.81416E+02

12. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.70000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.26801E+02 SHOULD BE 2.81219E+02 (0): URR dens. (a)

SECTION 151

ENERGY = 1.70000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.26801E+02 SHOULD BE 2.81219E+02

13. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.75000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.26572E+02 SHOULD BE 2.81022E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.75000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.26572E+02 SHOULD BE 2.81022E+02

14. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.80000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.26343E+02 SHOULD BE 2.80826E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.80000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.26343E+02 SHOULD BE 2.80826E+02

15. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.85000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.26115E+02 SHOULD BE 2.80629E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.85000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.26115E+02 SHOULD BE 2.80629E+02

16. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.90000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.25886E+02 SHOULD BE 2.80432E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.90000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.25886E+02 SHOULD BE 2.80432E+02

17. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 1.20000E+04 / DENSITY 3.25431E+02 SHOULD BE 2.80040E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.25431E+02 SHOULD BE 2.80040E+02

18. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.10000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.24975E+02 SHOULD BE 2.79648E+02 (0): URR dens. (a)

SECTION 151

ENERGY = 2.10000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.24975E+02 SHOULD BE 2.79648E+02

19. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.20000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.24521E+02 SHOULD BE 2.79257E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.20000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.24521E+02 SHOULD BE 2.79257E+02

20. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.30000E+04. STRENGTH FUNCTION IS 1.20000E-04 / DENSITY 3.24067E+02 SHOULD BE 2.78867E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.30000E+04. STRENGTH FUNCTION IS 1.20000E-04 DENSITY 3.24067E+02 SHOULD BE 2.78867E+02

21. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / TOTAL OF 52 POINTS IN ERROR FOR THIS J-STATE (0): URR dens. (b)

FILE 2

SECTION 151

TOTAL OF 52 POINTS IN ERROR FOR THIS J-STATE TOTAL OF 52 POINTS IN ERROR FOR THIS J-STATE

22. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 3.50000E-04 / ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.81845E+02 SHOULD BE 2.19422E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 3.50000E-04 ENERGY = 1.19250E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.81845E+02 SHOULD BE 2.19422E+02

23. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.20000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.81815E+02 SHOULD BE 2.19399E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.20000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.81815E+02 SHOULD BE 2.19399E+02

24. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.25000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.81618E+02 SHOULD BE 2.19245E+02 (0): URR dens. (a)

SECTION 151

ENERGY = 1.25000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.81618E+02 SHOULD BE 2.19245E+02

25. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.30000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.81420E+02 SHOULD BE 2.19091E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.30000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.81420E+02 SHOULD BE 2.19091E+02

26. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.35000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.81223E+02 SHOULD BE 2.18938E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.35000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.81223E+02 SHOULD BE 2.18938E+02

27. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.40000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.81026E+02 SHOULD BE 2.18785E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.40000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.81026E+02 SHOULD BE 2.18785E+02

28. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.45000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.80830E+02 SHOULD BE 2.18632E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.45000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.80830E+02 SHOULD BE 2.18632E+02

29. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.80633E+02 SHOULD BE 2.18478E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.80633E+02 SHOULD BE 2.18478E+02

30. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.55000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.80437E+02 SHOULD BE 2.18326E+02 (0): URR dens. (a)

SECTION 151

ENERGY = 1.55000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.80437E+02 SHOULD BE 2.18326E+02

31. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.60000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.80240E+02 SHOULD BE 2.18173E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.60000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.80240E+02 SHOULD BE 2.18173E+02

32. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.65000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.80044E+02 SHOULD BE 2.18020E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.65000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.80044E+02 SHOULD BE 2.18020E+02

33. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.70000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.79848E+02 SHOULD BE 2.17867E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.70000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.79848E+02 SHOULD BE 2.17867E+02

34. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.75000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.79652E+02 SHOULD BE 2.17715E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.75000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.79652E+02 SHOULD BE 2.17715E+02

35. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.80000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.79456E+02 SHOULD BE 2.17562E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.80000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.79456E+02 SHOULD BE 2.17562E+02

36. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.85000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.79261E+02 SHOULD BE 2.17410E+02 (0): URR dens. (a)

SECTION 151

ENERGY = 1.85000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.79261E+02 SHOULD BE 2.17410E+02

37. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 1.90000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.79065E+02 SHOULD BE 2.17258E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 1.90000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.79065E+02 SHOULD BE 2.17258E+02

38. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.78675E+02 SHOULD BE 2.16954E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 3.50000E-04

DENSITY 2.78675E+02 SHOULD BE 2.16954E+02

39. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.10000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.78284E+02 SHOULD BE 2.16650E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.10000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.78284E+02 SHOULD BE 2.16650E+02

40. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.20000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.77895E+02 SHOULD BE 2.16347E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.20000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.77895E+02 SHOULD BE 2.16347E+02

41. Level density in URR not in agreement with PSYCHE's expectations FILE 2 / SECTION 151 / ENERGY = 2.30000E+04. STRENGTH FUNCTION IS 3.50000E-04 / DENSITY 2.77507E+02 SHOULD BE 2.16045E+02 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 2.30000E+04. STRENGTH FUNCTION IS 3.50000E-04 DENSITY 2.77507E+02 SHOULD BE 2.16045E+02

42. Non-threshold reaction with Q value differing from PSYCHE's expectations FILE 3 / SECTION 107 / THE CALCULATED Q 7.85277E+06 DISSAGREES WITH THE GIVEN Q 0.00000E+00 (0): Iffy Q

FILE 3

SECTION 107

THE CALCULATED Q 7.85277E+06 DISSAGREES WITH THE GIVEN Q 0.00000E+00

- groupie Errors:
 - 1. Very small elastic cross section found 0: Small elastic

- fudge-4.0 Warnings:
 - 1. Missing a channel with a particular angular momenta combination resonances / resolved / MultiLevel_BreitWigner (Error # 0): missingResonanceChannel

```
WARNING: Missing a channel with angular momenta combination L=0, J=1.5 and S=1.5 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=0.5 and S=1.5 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=1.5 and S=1.5 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=2.5 and S=1.5 for "capture"
```

- fudge-4.0 Errors:
 - 1. Calculated and tabulated Q values disagree.

 reaction label 17: n[multiplicity:'2'] + Sm143 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -10335219.00860596 eV vs -1.0519e7 eV!
```

2. Calculated and tabulated Q values disagree.

reaction label 18: n/multiplicity:'3'] + Sm142 + qamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -18791307.28839111 eV vs -1.9121e7 eV!

3. Calculated and tabulated Q values disagree. reaction label 19: n + H1 + Pm143 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -5794161.252990723 eV vs -6.295e6 eV!

4. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.

reaction label 19: n + H1 + Pm143 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error # 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 9.e6 eV WARNING: Extra zero-probability outgoing energies found at incident energy 1.e7 eV WARNING: Extra zero-probability outgoing energies found at incident energy 1.1e7 eV WARNING: Extra zero-probability outgoing energies found at incident energy 1.2e7 eV ... plus 9 more instances of this message
```

5. Calculated and tabulated Q values disagree. reaction label 20: H1 + Pm144 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 782796.2979278564 eV vs 2.32e5 eV!

6. Calculated and tabulated Q values disagree. reaction label 21: $H1 + Pm144_{-}e1$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 722056.2979278564 eV vs 171260. eV!

7. Calculated and tabulated Q values disagree. reaction label 22: H1 + Pm144-e2 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 716166.2979278564 eV vs 165370. eV!

8. Calculated and tabulated Q values disagree. reaction label 23: $H1 + Pm144_{-}e3$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 702756.2979278564 eV vs 151960. eV!

9. Calculated and tabulated Q values disagree.
reaction label 24: H1 + Pm144_e4 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 610996.2979278564 eV vs 6.02e4 eV!

10. Calculated and tabulated Q values disagree. reaction label 25: H1 + Pm144_e5 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 587376.2979278564 eV vs 36580. eV!

11. Calculated and tabulated Q values disagree.

reaction label 26: H1 + Pm144-e6 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 575446.2979278564 eV vs 24650. eV!

12. Calculated and tabulated Q values disagree. reaction label 27: $H1 + (Pm144_c -> Pm144 + gamma)$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 575446.2979278564 eV vs 24650. eV!

13. Calculated and tabulated Q values disagree. reaction label 28: He4 + Nd141 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 8251587.169998169 eV vs 7.873e6 eV!

14. Calculated and tabulated Q values disagree. reaction label 29: He4 + Nd141-e1 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 8058507.169998169 eV vs 7679920. eV!

15. Calculated and tabulated Q values disagree. reaction label 30: He4 + Nd141-e2 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 7494887.169998169 eV vs 7.1163e6 eV!

16. Calculated and tabulated Q values disagree. reaction label 31: He4 + Nd141_e3 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 7028287.169998169 eV vs 6.6497e6 eV!

17. Calculated and tabulated Q values disagree. reaction label 32: He4 + Nd141-e4 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6906067.169998169 eV vs 6527480. eV!

18. Calculated and tabulated Q values disagree. reaction label 33: He4 + Nd141_e5 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6847987.169998169 eV vs 6.4694e6 eV!

19. Calculated and tabulated Q values disagree. reaction label 34: He4 + Nd141_e6 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6835387.169998169 eV vs 6.4568e6 eV!

20. Calculated and tabulated Q values disagree. reaction label 35: He4 + Nd141-e7 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6686907.169998169 eV vs 6308320. eV!

21. Calculated and tabulated Q values disagree. reaction label 36: He4 + Nd141 = 8 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6669587.169998169 eV vs 6.291e6 eV!

22. Calculated and tabulated Q values disagree. reaction label 37: He4 + Nd141-e9 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6654687.169998169 eV vs 6.2761e6 eV!

23. Calculated and tabulated Q values disagree. reaction label 38: He4 + Nd141_e10 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6627287.169998169 eV vs 6.2487e6 eV!

24. Calculated and tabulated Q values disagree. reaction label 39: He4 + (Nd141_c -> Nd141 + gamma) (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6627287.169998169 eV vs 6.2487e6 eV!

25. Calculated and tabulated Q values disagree. reaction label 40: Sm145 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 7014225.494644165 eV vs 6.757e6 eV!

26. Calculated and tabulated Q values disagree. reaction label 41: n + He4 + Nd140 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 735064.254699707 eV vs 7.6e4 eV!

27. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.

reaction label 41: n + He4 + Nd140 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error # 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 7.e6 eV WARNING: Extra zero-probability outgoing energies found at incident energy 8.e6 eV WARNING: Extra zero-probability outgoing energies found at incident energy 9.e6 eV WARNING: Extra zero-probability outgoing energies found at incident energy 1.e7 eV ... plus 11 more instances of this message
```

28. Calculated and tabulated Q values disagree.

reaction label 42: n[multiplicity:'2'] + He4 + Nd139 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -10539720.11831665 eV vs -1.043e7 eV!

29. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.

reaction label 42: n[multiplicity:'2'] + He4 + Nd139 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error <math># 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 1.8e7 eV WARNING: Extra zero-probability outgoing energies found at incident energy 1.9e7 eV WARNING: Extra zero-probability outgoing energies found at incident energy 2.e7 eV
```

30. Calculated and tabulated Q values disagree. reaction label 43: n[multiplicity:'2'] + H1 + Pm142 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -16129380.26159668 eV vs -1.625e7 eV!

31. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.

reaction label 43: n[multiplicity:'2'] + H1 + Pm142 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error <math># 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 1.9e7 eV WARNING: Extra zero-probability outgoing energies found at incident energy 2.e7 eV
```

- njoy2012 Warnings:
 - 1. Recoil is not given, so one-particle recoil approximation used. heatr...prompt kerma (0): HEATR/hinit (4)

---message from hinit---mf6, mt102 does not give recoil za= 62145 photon momentum recoil used.